

WE CLAIM:

1. A printhead that comprises
an elongate substrate that defines a plurality of groups of ink supply channels, each group
5 being in fluid communication with a respective ink of a predetermined color and extending along
a length of the substrate along a plurality of substantially parallel paths; and
a plurality of nozzle arrangements that are positioned on the substrate, each nozzle
arrangement comprising
a nozzle chamber structure that is positioned on the substrate to define a nozzle
10 chamber in fluid communication with an ink supply channel and an ink ejection port in
fluid communication with the nozzle chamber; and
a micro-electromechanical ink ejection mechanism that is positioned on the
substrate operatively with respect to the nozzle chamber to eject ink from the ink ejection
port.
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2. A printhead as claimed in claim 1, in which the substrate defines two rows of ink supply
channels for each group of ink supply channels.
3. A printhead as claimed in claim 2, in which the nozzle arrangements are oriented so that
20 a predetermined number of nozzle chamber structures are provided for each ink supply channel,
said predetermined number of nozzle arrangements being positioned so that each group of ink
supply channels corresponds with two rows of nozzle chamber structures.
4. A printhead as claimed in claim 3, in which the micro-electromechanical ink ejection
25 mechanism of each nozzle arrangement includes an elongate actuator arm that is fixed at one end
to the substrate and has an ink ejection member positioned on an opposite end and in a respective
nozzle chamber, the nozzle arrangements being oriented so that the nozzle chamber structures of
each pair of rows are adjacent each other, with the actuator arms of each row of nozzle
arrangements being in a side-by-side orientation, such that the nozzle arrangements define three
30 spaced pairs of rows of nozzle chamber structures corresponding to respective inks.
5. A printhead as claimed in claim 4, in which nozzle arrangements are positioned so that
the actuator arms of the nozzle arrangements are oriented at an acute angle with respect to a print
medium feed direction.
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6. A printhead as claimed in claim 5, in which each actuator arm of an intermediate pair of rows of nozzle arrangements are interposed between consecutive actuator arms of one of each outer pair of rows of nozzle arrangements.

5 7. A printhead as claimed in claim 1, in which each ink supply channel is in fluid communication with ten nozzle chamber structures.